

ABSTRACT

DETERMINATION OF SPECIES FROM COCCOIDEA, APHIDOIDEA AND ALEYRODOIDEA SUPERFAMILIES ON SOUR ORANGE IN AYDIN PROVINCE AND POPULATION FLUCTUATION OF *Aleurotrixus* *floccosus* (Maskell)(Hemiptera: Aleyrodidae) AND ITS NATURAL ENEMIES

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Population level of *Aleurotrixus floccosus* (Maskell) has increased and damaged on sour orange in Aydın province recently. Additionally, whiteflies, coccids and aphids are also becoming pests from time to time. It was aimed to determine the species from Aleyrodoidea, Coccoidea and Aphidoidea superfamilies on sour orange. In addition, it was studied population fluctuations and natural enemies of *A. floccosus*. Samplings were conducted to determine pests and natural enemies on sour orange grown for landscape on Boulevards in three different district of the city namely, Muğla Boulevard, Atatürk Boulevard and Batı Gazi Boulevard in 2012 and 2013. Leaves were sampled on the trees and examined under stereo binocular microscope every 15 days between april and december to determine population fluctuations of *A. floccosus*. As a result, *Coccus hesperidum* (Linnaeus), *Ceroplastes rusci* (Linnaeus) and *Aonidiella aurantii* (Maskell) were determined in Coccoidea superfamily. Four aphid species in Aphidoidea superfamily, namely *Aphis spiraecola* (Patch), *Aphis gossypii* (Glover), *Toxoptera aurantii* (Boyer de Fonscolombe) and *Myzus (Nectarosiphon) persicae* (Sulzer) were also identified. *A. floccosus* was determined from Aleyrodidae superfamily, and it has 3 generation a year. Its population reached to a peak in second generation in June-July, then the population level has decreased. It overwinters in nymph and pupae steges on sour orange trees in Aydın. *Cales noacki* Howard (Hymenoptera: Aphelinidae) was found as natural enemy on *A. floccosus*. Parasitization was the highest in September in both study periods and parasitization rate has reached to 24,2 per cent. It is likely that *A. floccosus* can reach to high populations in a good climatic conditions. We conclude that *A. floccosus* can be controlled by its parasitoid if it can be protected during the sprayings for mosquito control in the city.

Key words: Coccidae, Diaspididae, Pseudococcidae, Aleyrodidae, *Aleurothirixus floccosus*, *Cales noacki*, Aydın, sour orange.